(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 18 December 2003 (18.12.2003)

PCT

(10) International Publication Number WO 03/103944 A1

(51) International Patent Classification7:

B32B 3/02

(21) International Application Number: PCT/US03/17865

(22) International Filing Date: 5 June 2003 (05.06.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10/165,480

7 June 2002 (07.06.2002) US

- (71) Applicant: INTERFACE, INC. [US/US]; 2859 Paces Ferry Road, Suite 2000, Atlanta, GA 30339 (US).
- (72) Inventors: DANIEL, Sydney, D.; 702 Pineywoods Drive, LaGrange, GA 30240 (US). OAKEY, David, D.; 868 Pineywoods Drive, LaGrange, GA 30240 (US).
- (74) Agents: PRATT, John, S. et al.; Kilpatrick Stockton LLP, Suite 2800, 1100 Peachtree Street, Atlanta, GA 30309 (US).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Z

(54) Title: ASYMMETRICALLY SHADED CARPET TILES AND CARPET TILE INSTALLATIONS CREATING ILLUSIONS OF LIGHT AND DEPTH

(57) Abstract: Carpet tiles that can be positioned adjacent each other on a flooring surface to create the appearance of light emanating from the floor or the illusion of depth. The flooring having the properties of this invention is achieved by producing rectilinear flooring modules that have color distributed on the module from very dark to very light across the tile from one edge to the opposite edge. Tufts of yarns provide a "background" of constant color and intensity along the longer dimension of the tile that progresses across the tile from very dark along one side to very light along the other side. Between the dark and light tiles edges is an intermediate region of progression of colors that begin dark and become light. The intensities of the colors in the intermediate region preferably progress from bright to relatively muted between the dark and the light tile edges so that the intensity of the light color tile edge is greater, and thus the light color is more prominent on the carpet tile, than the color adjacent it on a carpet tile. This results in the light color edges "standing out" on the carpet tiles, which contributes to the illusions created by this invention, especially when the light color edges are positioned adjacent dark color edges.

WO 03/103944 PCT/US03/17865

Asymmetrically Shaded Carpet Tiles and Carpet Tile Installations Creating Illusions of Light and Depth

Field of the Invention

This invention relates generally to carpet tiles that can be positioned adjacent each other on a flooring surface to create the appearance of light emanating from the floor or the illusion of depth.

Background of the Invention

Countless different variables, such as, for example, color, pattern, and material, can be altered to impact and vastly vary the appearance of carpet floor coverings, yet the resulting flooring, whether in broadloom or carpet tile form, has traditionally appeared as two-dimensional on the flooring surface. While most carpet invariably contains variations in pile height, such relatively minor pile height variations fail to impart significant actual or apparent depth to the flooring surface.

Commercial carpet tile has also been most widely used in situations where large designs and bold designs are inappropriate. For instance, while such tile has been widely used in the large spaces of open plan office facilities, those spaces are typically occupied by office furniture and partitions making it impossible to see any large expanses of flooring. Designs appropriate for such spaces are small scale ones, which is reinforced by the design constraints associated with the modular form of carpet tile. The contexts in which carpet tile has traditionally been used and the design considerations mentioned above and other considerations have resulted in strong tendencies to design carpet tiles that are relatively uniform in appearance so that an assembly of carpet tiles on a floor will have a similar, relatively uniform appearance. In larger spaces such as airport concourses considerations of such uniformity of appearance, as well as concern about staining and replacement of damaged or stained tiles, have often been of paramount concern. As a result, conventional carpet tile design have not provided the sort of bold, large designs often desired for large spaces, particularly including "public" spaces like foyers and ballrooms.

Modular carpet tiles enable alteration of the appearance of a floor covering by simply rearranging all or some of the individual carpet tiles on the floor.

Summary of the Invention

Light is a central, recurring metaphor of humankind, used through the ages to signify divine wisdom. Drawing on this rich metaphorical heritage as ancient as humankind and as universal as music, this invention provides modular flooring designs, particularly including carpet tile designs, suitable for grand spaces as well as smaller scale rooms. In the carpet tile designs and configurations of this invention particular progressions and positioning of color, intensity, and shading, and particular placement of modules relative to each other in a flooring installation, result in flooring in bold, large scale designs that include flooring regions appearing either to have spatial depth or light emanating from the floor.

The flooring having the properties of this invention is achieved by producing rectilinear, typically rectangular, flooring modules (preferable twice as long as wide) that have color distributed on the module from very dark to very light across the tile from one (preferably longer) edge to the opposite edge. In one embodiment of this invention, uniform height tufts of yarns provide a "background" of constant color and intensity along the longer dimension of the tile that progresses across the tile from very dark along one side to very light along the other side. Between dark and light is an intermediate region of progression of colors that begin dark and become light. In this embodiment, the heights are controlled of pattern-making yarn tufts of a single appearance compatible with all of the other yarns, which present all over the tile in order to impart a pattern of shapes on the tile.

It is preferable that the colors in the intermediate region progress from dark to light between the dark bands and the light bands. This facilitates smooth color transition between the dark color and the light color across the intermediate region. While any number of colors may be used in the intermediate region, it is preferable that enough colors be used to ensure this smooth transition.

Moreover, the intensities of the colors in the intermediate region preferably progress from bright to relatively muted between the dark bands and the light bands so that the intensity of the light color tile edge is greater, and thus the light color is more prominent on the carpet tile, than the color adjacent it on a carpet tile. This results in the light color edges "standing out" on the carpet tiles, which contributes to the illusions created by this invention, especially when the light color edges are positioned adjacent dark color edges.

In installations of two tiles of this invention with abutting light regions the presence of the tile areas gradually shading into the lighter region will provide an illusion of depth or of light emanating from a "soft" edged region of the floor. In installations of such tiles with a light region abutting a dark one, a similar illusion of depth or of light is produced, but with one indistinct margin opposing a sharply defined edge, as might be produced by light coming from behind a solid object like an object on the floor.

Paired rectangular tiles of this invention can provide large square modules with bold, central light regions, and a wide variety of other designs can be produced by varying the arrangement of modules on a floor.

Brief Description of the Drawings

The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawing(s) will be provided by the Patent and Trademark Office upon request and payment of the necessary fee.

- FIG. 1 is a top plan view of a carpet web pattern in accordance with one embodiment of this invention.
- FIG. 2 is a top plan view of a carpet web pattern in accordance with an alternative embodiment of this invention.
- FIG. 3 is a top plan view of a carpet web pattern in accordance with an alternative embodiment of this invention.
- FIG. 4 is a plan view of rectangular modules arranged in a "herringbone" pattern.
- FIG. 5 is a perspective view of carpet tiles of this invention having the tufting pattern depicted in FIG. 3 and assembled on a floor in a herringbone pattern as depicted in FIG. 4.
- FIG. 6 is a top or overhead view of an installation of carpet tiles of this invention having the tufting pattern depicted in FIG. 2 and arranged as pairs of rectangular tiles with abutting light edges where the pairs are quarter-turned relative to each other.
- FIG. 7 is a perspective view of carpet tiles of this invention having the tufting pattern of FIG. 1 and arranged in pairs of rectangular tiles with abutting light edges, together with tiles having other patterns.
- FIG. 8 is a perspective view of a large installation of rectangular carpet tiles of this invention having the tufting pattern of FIG. 1 arranged in four assemblies of pairs

of tiles with abutting light edges and with the pairs in each assembly of tile pairs quarter-turned relative to each other.

Detailed Description of the Drawings

This invention relates to carpet tiles having bands of dark and light colors located on at least one pair of opposed edges of the tiles. For purposes of this patent, an "edge" refers to the region on the face of a carpet tile near the actual side edge of the tile. The number of possible patterns that may appear on the tiles of this invention is virtually limitless, so long as this color scheme (i.e., edges having light and dark bands in accordance with this invention) is present on the tiles. Alternatively, tiles of this invention may be provided without any tufting or other pattern other than the progression from light to dark across the tile.

FIGS. 1-3 respectively illustrate alternative embodiments of carpet web patterns 10, 20, and 30, all consistent with this invention. Carpet tiles utilizing the web patterns shown in FIGS. 1-3 can be seen in FIGS 5-8, by reference to which understanding of the following will be facilitated.

FIGS. 1-3 each show one full "repeat" of the respective patterns 10, 20, and 30. A full "repeat" is one complete segment of the pattern. Generally, a carpet web will be formed with a pattern repeating across the width of the web, i.e. with multiple pattern repeats across the web, as well as along the length of the web. A web having any number of full or partial repeats of a pattern may be produced depending, in part, on manufacturing capabilities, including the equipment used to produce the web. The web may then be partitioned into carpet tiles of any shape or size, provided that the resulting tiles exhibit the color scheme, as set forth below. Moreover, the tiles of this invention need not be cut from a web, but rather the colors and pattern (if any) may be printed on the face of pre-formed carpet tiles.

As discussed above, the carpet tiles of this invention may be manufactured, among other ways, by manufacturing a floor covering web and then cutting the web into carpet tiles. For example, a web may be, but does not have to be, manufactured using a conventional carpet tufting machine to form a textile floor covering face and attaching that face to appropriate backing structure. Among other alternatives, the web face may be produced on a carpet tufting machine having 1/4 gauge and 1/8 gauge needle bars. By controlling the "thread-up" (i.e., the arrangement of yarn colors dedicated to the needles of the machine) and height of the yarn tufts (i.e., the

farther the yarn is pushed through the primary backing, the greater its height in the finished carpet tile and the more predominant the color of the yarn is to the ordinary observer), a desired pattern (and full and partial repeats thereof, if desired) may be formed on a web.

Each needle is threaded with a dedicated yarn type (e.g., single color, space dyed, barber pole, etc.) and color (for purposes of this patent, "color" includes variations in shades of a single color). The pattern is formed on the web by color contrast between adjacent yarn colors on a single needle row, by color contrast between the yarn colors on the first needle row and the second needle row, and by the prominence of particular yarns on the web face as a result of tuft height. Thus, the types and colors of yarn used should be selected to achieve the desired contrast. At least two colors are generally necessary to achieve color contrast. However, it is preferable to use a wide variety of colors on the tiles of this invention.

The thread-up should include yarns of at least one dark color and at least one light color. These yarns should be tufted so that relatively wide bands of the dark color and relatively wide bands of the light color alternately appear across the web. Additional colors that fall between the dark and light colors (i.e, are lighter than the dark color and darker than the light color) create an intermediate region containing bands of color between these light and dark bands.

It is preferable that the colors in this intermediate region progress from dark to light between the dark bands and the light bands. This facilitates a smooth color transition between the dark color and the light color across the intermediate region. While any number of colors may be used in the intermediate region, it is preferable that enough colors be used to ensure this smooth transition. It is possible to practice this invention by using a single color that progresses from a dark shade to a light shade across the tile. However, this invention is preferably practiced by using a series of different colors (not just shades of a color) that progress from dark to light across the tile.

Moreover, the intensities of the colors in the intermediate region preferably progress from bright to relatively muted between the dark bands and the light bands so that the intensity of the light color tile edge is greater, and thus the light color is more prominent on the carpet tile, than the color adjacent it on a carpet tile. This results in the light color edges "standing out" on the carpet tiles, which contributes to

the illusions created by this invention, especially when the light color edges are positioned adjacent dark color edges.

The carpet web with this color scheme may then be divided into individual carpet tiles. The longitudinal cuts should be located on the web so that they fall within, and preferably in the center of, each alternate dark and light band on the web. Thus, the light and dark bands should be made wide enough on the web so that tiles on both sides of a longitudinal cut will have a portion of the band (either light or dark) through which the longitudinal cut is being made. In this way, a tile cut from the web will have a portion of the dark band on one edge and a portion of the light band on the opposing edge, separated from the dark band by an intermediate region containing bands of colors. Where these wide bands of light and dark colors are placed on the web will obviously depend on the size of the tiles intended to be cut from the web. The lateral cuts may be made at any place along the length of the web, depending on the desired shape (e.g., square, rectangular, etc.) and dimensions of the tiles.

The following is an example of a thread-up that uses a variety of colors to create the web face. This thread-up represents only half of the 1/8 gauge thread-up for a tufting machine six feet wide, and thus the thread-up would need to be repeated on the machine to produce a larger web face. While this specific thread-up example is provided, it should be understood that any thread-up of the machine may be created in accordance with this invention so long as the resulting web, when appropriately cut, results in carpet tiles having a dark color band and a light color band on at least one pair of opposed edges in accordance with this invention.

Row of 1/8 Gauge Needles

Needle Position	Yarn
1-15	Α
16-25	AB
26-35	В
36-45	ВС
46-55	С
56-65	CD
66-75	D
76-85	DE
86-95	Е
96-105	EF
106-115	F
116-125	F G
126-135	G
136-145	GH
146-175	H
176-185	GH
186-195	G
196-205	F G
206-215	F
216-225	EF
226-235	E
236-245	DE
246-255	D
256-265	CD
266-275	С
276-285	ВС
286-295	В
296-305	A B
306-320	A

Row of 1/4 Gauge Needles

TEG TO GE 17 T GREEKE THOUGHES	
Needle Position	Yarn
All	I

With this thread-up, the background color scheme of the resulting web is symmetrical about the central, longitudinal axis of the web. Such symmetry is not required, however.

The background of the web is tufted by the 1/8 gauge needles. The tufts produced by the 1/8 gauge needles will generally be uniform in height. While the 1/8 gauge needles are preferably threaded with solid colored yarns, other yarn types (e.g., barber pole, space dyed, etc.) may be used.

With this thread-up, the background changes colors frequently in a progression from dark to light to dark, etc. across the web. The background includes eight different background yarns (A-H), each having a particular color. Yarns A and H are either the dark or light color. If yarn A is the dark colored yarn, yarn H is the light colored yarn, and vice versa. Yarns B-G create the bands of colors in the intermediate region between the dark and light color bands.

In this example, background yarn A is threaded on needles 1-15, background yarns A and B are alternately threaded on needles 16-25, background yarn B is threaded on needles 26-35, etc. While yarns B-G of any color may be used (although, preferably, are all lighter than the dark color and darker than the light color), yarns B-G are preferably chosen so that a progression of color from dark to light and a progression of color intensity from bright to relatively muted is created in the intermediate region between the dark and light bands.

The tufting pattern is produced on the web by the 1/4 gauge needles. The height of the tufts formed by the 1/4 gauge needles varies depending on the pattern. Thus, patterns 10, 20, and 30 (or any other desired pattern) may all be formed on a web having the above-described background by merely adjusting the height of the tufts formed by the 1/4 gauge needles. While the 1/4 gauge needles may be threaded with any type of yarn, yarns of solid colors have proven particularly well-suited for this application. In this example, all of the 1/4 gauge needles are threaded with yarn I. While with this particular thread-up only one type and color of yarn is used to form the pattern, the pattern may be formed by a variety of types and colors of yarn. Yarn I preferably has, but does not have to have, a relatively neutral color which provides enough of a contrast to the background colors to portray a pattern without overpowering and significantly detracting from the background colors.

After the web is formed, tiles may be cut from the web. Tiles in accordance with this invention may be cut into rectilinear shapes including squares, but are preferably cut into rectangles. As explained above, the longitudinal cuts should be located so that they fall within, and preferably in the center of, each alternate dark and light band (formed in this case by yarns A and H) on the web. In this way, a tile cut from the web will have a portion of the dark band (formed by yarn A or H) on one edge and a portion of the light band (formed by yarn A or H) on the opposing edge, separated from the dark band by an intermediate region of bands of colors (formed by yarns B-G).

As an alternative, if an installation is to use pairs of tiles with abutting light edges like those shown in FIGS. 6, 7 and 8, such "pairs" could be cut from the web as a single square tile having the light region in the middle of the large square tile. A variety of practical considerations may make it preferable to cut the web into rectangular tiles as described above even if the tiles are to be reassembled into pairs of tiles similar to their relative orientation on the web.

It should also be understood that tiles in accordance with this invention need not be produced from a tufted carpet web. Rather any method may be used to form tiles having a color scheme in accordance with this invention. For example, the colors and patterns disclosed herein could be printed on pre-formed carpet tiles with no pattern or only some elements of the pattern.

The tiles of this invention can be assembled on a flooring surface in numerous arrangements of similar and dissimilar tiles to create a number of different looks, all of which give the impression of light emanating from the floor. As noted above, the tiles can be installed on the floor in the same relative positions they occupied in the web. Alternatively, the tiles could be placed in aligned rows and columns but be reoriented so that all or at least some dark tile edges are placed adjacent light tile edges. This contrast between dark and light colors helps create the illusion of light.

However, in other situations, tiles of this invention may installed as aligned columns that do not form aligned rows of modules. For example, the tiles may be positioned so that a column of tiles appears shifted up or down relative to adjacent tile columns ("the ashlar installation method"). This staggers the horizontal seams or tile edges formed by the adjacency of the "tops" and "bottoms" of tiles within the columns. In yet other installations, a "brick-laid" installation method may be desired in which "rows" of tiles are aligned, but the columns are staggered. Again, placement of the dark edges relative to the light edges can be controlled by the installer to vary the appearance of light on the floor.

Square tiles cut from the web, or pairs of rectangular tiles together forming a square, can be installed in a "quarter-turn" pattern, meaning that each tile (or pair of rectangular tiles) is positioned in an orientation rotated ninety degrees by reference to each adjacent tile (or pair of rectangular tiles). Tiles are typically produced with a direction arrow on the back so that tiles installed with the arrows all pointing in the same direction will be in the same rotational orientation as they had within the web. In a "quarter-turn" installation, half of the tiles (or pairs of rectangular tiles) have their

arrow pointing in one direction, and the other half of the tiles (or pairs of rectangular tiles) have their arrow pointing in a direction offset by ninety degrees from the direction of the arrows of the first half.

Rectangular shaped tiles cut from the web may also be installed in a "herringbone" pattern, in which, similar to the quarter-turn installation method, some tiles are positioned in an orientation rotated ninety degrees by reference to adjacent tiles. More specifically, in a herringbone installation, L-shaped pairs of tiles (having a short side of one tile abutting a long side of the other tile) are nested (see FIG. 4).

Any mixture of these installation methods may be used. Alternatively, tiles of different shapes may also be installed in the same installation. Although it is possible, it is not necessary that the tiles of this invention be installed on a flooring surface only with other tiles of this invention bearing the same pattern. Rather, tiles of this invention bearing different or no patterns may be mixed and installed in any fashion to vary the appearance of the flooring. Moreover, a flooring installation may include a mixture tiles of this invention and other tiles, not in accordance with this invention, bearing different patterns and color schemes. The appearance of light on the floor is particularly prominent in such an installation if the tiles other than those of this invention are relatively dark compared to the light edges of the tiles of this invention.

The foregoing is provided for the purpose of illustrating, explaining and describing embodiments of the present invention. Further modifications and adaptations to these embodiments will be apparent to those skilled in the art and may be made without departing from the spirit of the invention or the scope of the following claims. For instance, different shapes and sizes of shapes than those illustrated can be used. Similarly, a wide variety of color combinations are possible. Furthermore, while the embodiment described above is tufted, the face fabric could also be woven on a conventional or computer controlled Jacquard or other loom, and the face fabric could be fusion bonded or formed in other manners. Moreover, the patterns or portions thereof could be printed on pre-formed carpet tiles. This invention could also be used for modular flooring or surface covering materials other than carpet tile, such as vinyl tile.

We claim:

- 1. A rectilinear carpet tile comprising:
 - a. a first edge comprising a dark color band;
 - b. an edge opposite the first edge comprising a light color band; and
- c. an intermediate region between the dark and light color bands comprising a plurality of colors which progress from dark to light between the dark color band and the light color band, wherein the light color band is more prominent on the carpet tile than the color directly adjacent the light color band on the tile.
- 2. The carpet tile of claim 1, wherein the tile is rectangular.
- 3. The carpet tile of claim 1, wherein the tile is formed by tufting a carpet face, attaching backing structure to the carpet face to form a carpet web, and cutting the web into tiles.
- 4. The carpet tile of claim 3, wherein the carpet web is formed by at least one row of tufts across the web comprising tufts of a series of yarn A, followed by a series of yarns AB, followed by a series of yarn B, followed by a series of yarns BC, followed by a series of yarn C, followed by a series of yarns CD, followed by a series of yarn B, followed by a series of yarn E, followed by a series of yarns EF, followed by a series of yarn F, followed by a series of yarns FG, followed by a series of yarn G, followed by a series of yarns GH, followed by a series of yarn H.
- 5. The carpet tile of claim 3, wherein the tile further comprises a pattern.
- 6. The carpet tile of claim 5, wherein the carpet web is formed by rows of tufts across the web, each of which rows comprises tufts of two gauges, the first gauge of which tufts comprises tufts of a series of yarn A, followed by a series of yarns AB, followed by a series of yarn B, followed by a series of yarns BC, followed by a series of yarn C, followed by a series of yarns CD, followed by a series of yarn D, followed by a series of yarns DE, followed by a series of yarns EF, followed by a series of yarn F, followed by a series of yarns FG, followed by a

series of yarn G, followed by a series of yarns GH, followed by a series of yarn H, and the second gauge of which tufts comprises tufts all of the same yarn.

- 7. The carpet tiles of claim 1, wherein the tiles are formed by printing the dark color band, light color band, and the intermediate region on the carpet tile.
- 8. Floorcovering comprising at least a first and a second carpet tile of claim 1 positioned abutting on a flooring surface.
- 9. The floorcovering of claim 8, wherein the first and the second carpet tiles are positioned so that the dark color band of the first tile abuts the light color band of the second tile.
- 10. A carpet web having a face comprising at least one dark color band, at least one light color band, and an intermediate region between the dark and light color bands comprising a plurality of background colors which progress from dark to light between the dark color band and the light color band, wherein the at least one light color band is more prominent on the web than colors adjacent the at least one light color band and wherein the web is separable into carpet tiles so that the tiles cut from the web all comprise at least a portion of the dark color band on a first tile edge and a portion of the light color band on a second tile edge opposite the first tile edge.
- 11. The web of claim 10, wherein the face is tufted.
- 12. The web of claim 10, wherein the face is woven.
- 13. The web of claim 10, wherein the face is fusion bonded.
- 14. The web of claim 10, further comprising a pattern.
- 15. The web of claim 14, wherein the pattern is formed on the web by a color that is not one of the plurality of background colors.
- 16. Carpet tiles cut from the web of claim 10.

- 17. The carpet tiles of claim 16, wherein the tiles are rectangular.
- 18. Floorcovering comprising a plurality of the carpet tiles of claim 16 positioned on a flooring surface.
- 19. The floorcovering of claim 18, wherein the dark color bands of at least some of the plurality of carpet tiles are positioned abutting light color bands of other of the plurality of tiles.
- 20. The floorcovering of claim 18, wherein the dark color bands of at least some of the plurality of carpet tiles are positioned abutting dark color bands of other of the plurality of tiles.
- 21. The floorcovering of claim 18, wherein the light color bands of at least some of the plurality of carpet tiles are positioned abutting light color bands of other of the plurality of tiles.
- 22. The floorcovering of claim 18, wherein at least some of the plurality of tiles are positioned in an ashlar installation pattern.
- 23. The floorcovering of claim 18, wherein at least some of the plurality of tiles are positioned in a brick laid installation pattern.
- 24. The floorcovering of claim 18, wherein at least some of the plurality of tiles are positioned in pairs of tiles, which pairs are quarter-turned relative to each other.
- 25. The floorcovering of claim 18, wherein the at least some of the plurality of tiles are positioned in a herringbone installation pattern.
- 26. A carpet tile installation comprising a mixture of tiles cut from the web of claim 10 and at least one tile not cut from the same web.
- 27. A method of producing the web of claim 10, comprising tuffing the web.

- 28. The method of claim 27, wherein the web is tufted at least partially by tufting a series of yarn A, followed by a series of yarns AB, followed by a series of yarn B, followed by a series of yarns BC, followed by a series of yarn C, followed by a series of yarns CD, followed by a series of yarn D, followed by a series of yarns DE, followed by a series of yarn E, followed by a series of yarns EF, followed by a series of yarn F, followed by a series of yarns FG, followed by a series of yarn G, followed by a series of yarns GH, followed by a series of yarn H.
- 29. A method of producing the web of claim 14, comprising tufting the web with the pattern.
- 30. The method of claim 29, wherein the web is tufted at least partially by forming rows of yarn tufts, each of which rows comprises yarn tufts of two gauges, the first gauge of which tufts comprises tufts of a series of yarn A, followed by a series of yarns AB, followed by a series of yarn B, followed by a series of yarns BC, followed by a series of yarn C, followed by a series of yarns CD, followed by a series of yarn D, followed by a series of yarns DE, followed by a series of yarn E, followed by a series of yarns EF, followed by a series of yarn F, followed by a series of yarns FG, followed by a series of yarn G, followed by a series of yarns GH, followed by a series of yarn H, and the second gauge of which tufts comprises tufts all of the same yarn.

-10

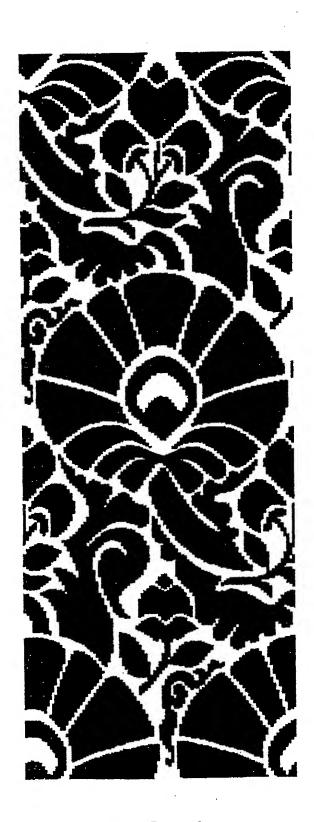


FIG. 1

6/5/07, EAST Version: 2.1.0.14

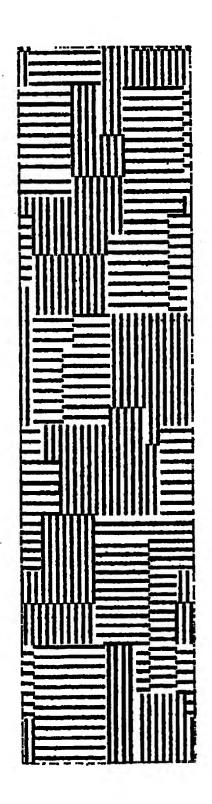


FIG. 2

6/5/07, EAST Version: 2.1.0.14

-30

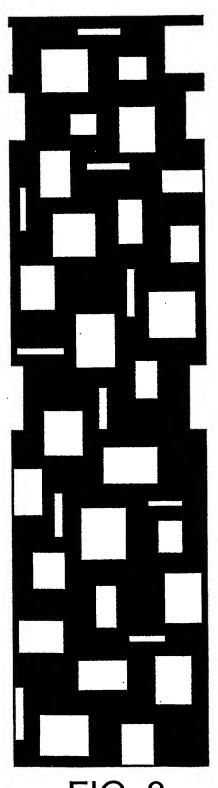


FIG. 3

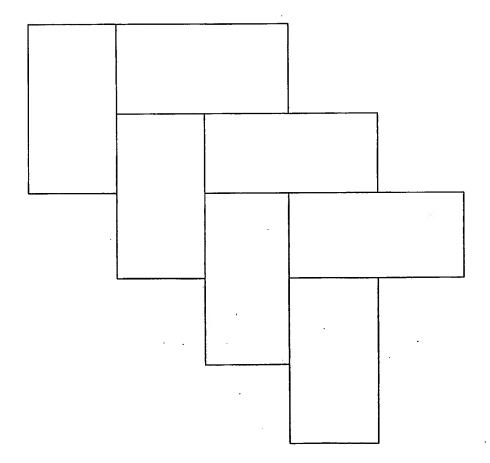


FIG. 4

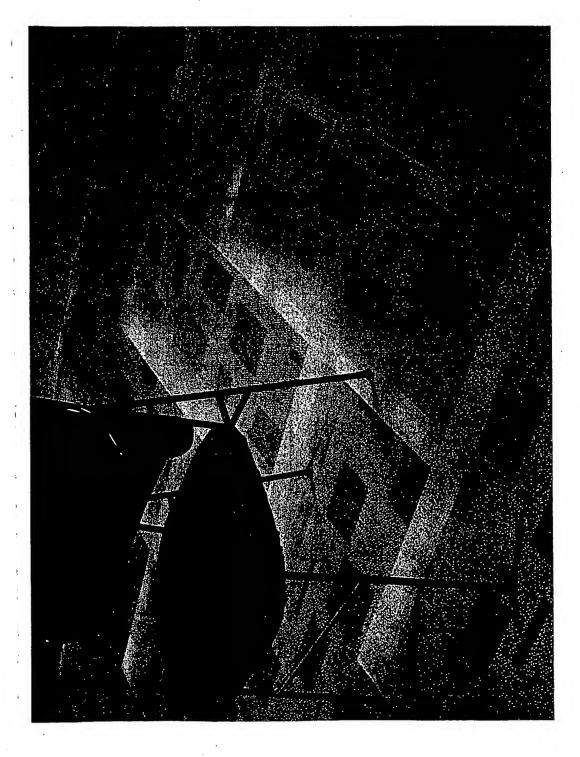


FIG. 5

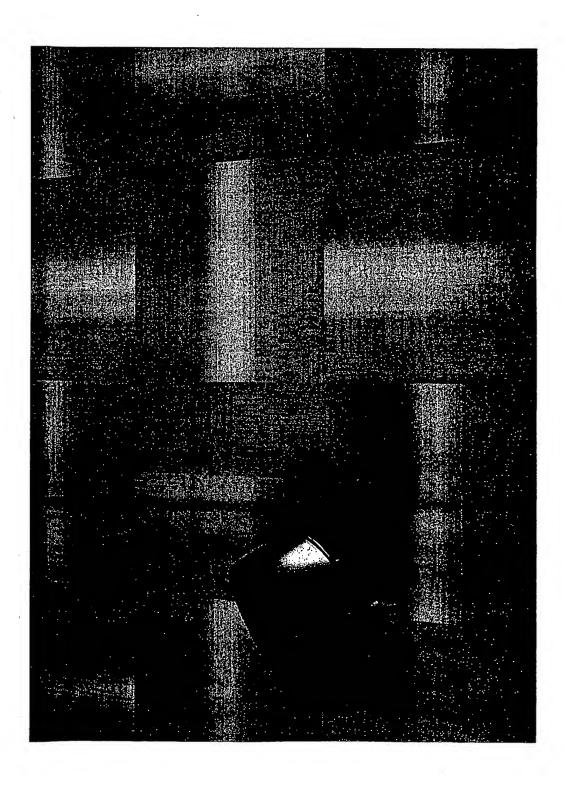


FIG. 6



